



## **RIDOT TMC Unplanned Incident Statistics and Performance Measures May 2008**

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is part of our ongoing Performance Measurement effort. Through this effort, we are quantifying the benefits of the ITS program in our state, and are also able to monitor improvements in the efficiency and effectiveness with which we manage roadway incidents. By making these statistics available to you on a monthly basis, we hope that you can learn more about the program and understand the benefit of the service we provide to the Rhode Island motoring.

These monthly reports represent statistics for unplanned incidents on Rhode Island's roadways. The types of incidents included in the report include disabled vehicles, debris on the roadway, emergency roadwork, and vehicle accidents, including jack-knifed trucks and vehicle spinouts. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (<http://www.tmc.state.ri.us>), including construction and incident information.

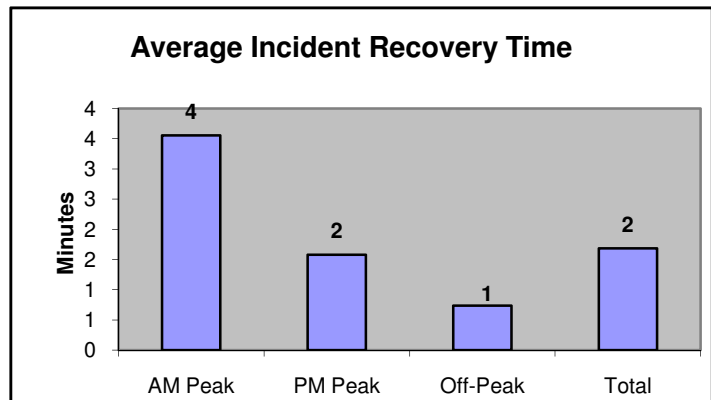
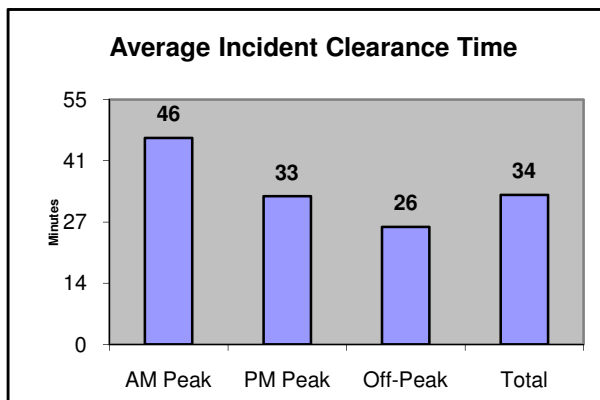
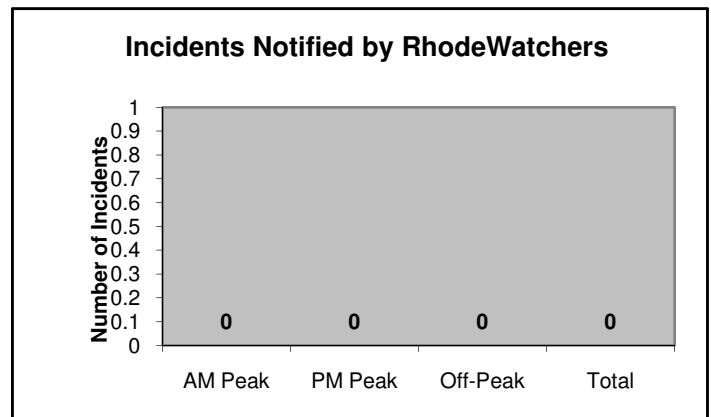
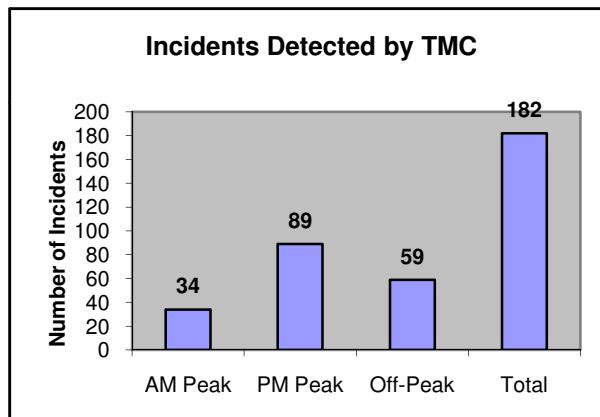
# RIDOT TMC Unplanned Incident Statistics and Performance Measures Report

## 1. Peak Period Incident Statistics\*

	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	36	90	61	187
Avg. Incident Duration (hr:min)	50	35	27	35
Avg. Incident Clearance Time (hr:min)	46	33	26	34
Avg. Incident Recovery Time (hr:min)	4	2	1	2
# Detected by TMC Operators (CCVE)	21	35	42	98
# Detected by TMC, State Police	13	54	17	84
# Notified by RhodeWatchers	0	0	0	0
# of Messages Posted VMS	3	5	7	15
# of Messages Posted DMS	18	38	30	86
# of Messages Posted HAR	12	20	21	53
# of Messages posted Web	34	75	50	159
Avg. Delay Cost**	\$210,912	\$147,392	\$114,695	\$148,955
Total Delay Cost	\$7,592,847	\$13,265,273	\$6,996,415	\$27,854,535

\* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

\*\* Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.



*Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways*

**Incident Clearance Time** is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

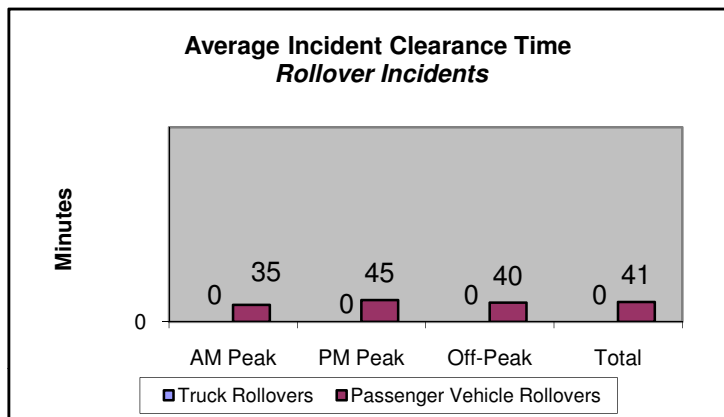
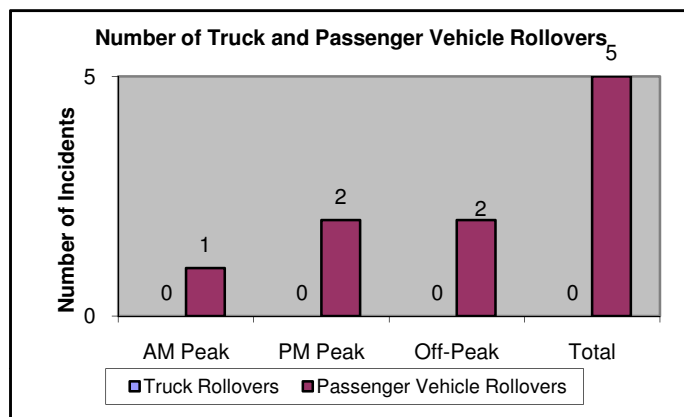
**Incident Recovery Time** is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.



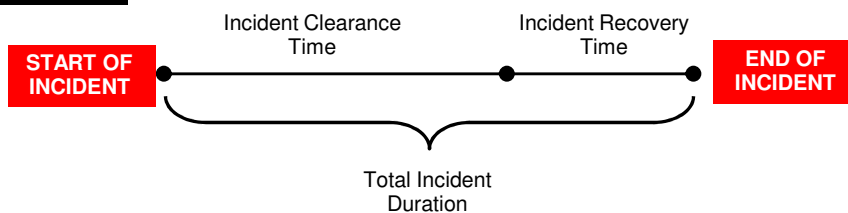
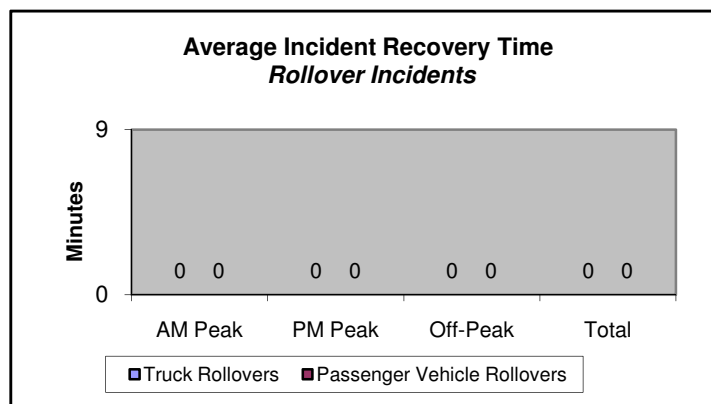
## 2. Rollover Incident Statistics\*

VEHICLES	Trucks				Automobiles			
	AM Peak	PM Peak	Off-Peak	Total	AM Peak	PM Peak	Off-Peak	Total
No. of Rollovers	0	0	0	0	1	2	2	5
Avg. Incident Duration (min)	0	0	0	0	35	45	40	41
Avg. Incident Clearance Time (min)	0	0	0	0	35	45	40	41
Avg. Incident Recovery Time (min)	0	0	0	0	0	0	0	0

\* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday



Roadway	Exit Number	Number Of Rollovers
Interstate 295 Northbound	8A	1
Interstate 295 Southbound	6	1
Interstate 95 Southbound	6	1
Interstate 95 Southbound	19	1
Route 4 Southbound	N/A	1
<b>TOTAL</b>		<b>5</b>



### 3. Incidents by Severity Level

Severity Level*	No. of Incidents
Severity 0	76
Severity 1	33
Severity 2	22
Severity 3	16
Severity 4	14
Unknown	26
<b>Total</b>	<b>187</b>

Number of Incidents with a Secondary

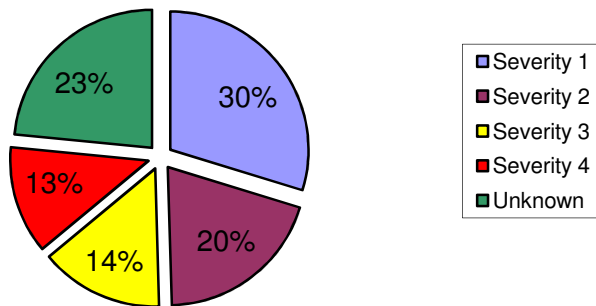
Incident:

Percentage of Incidents with a Secondary

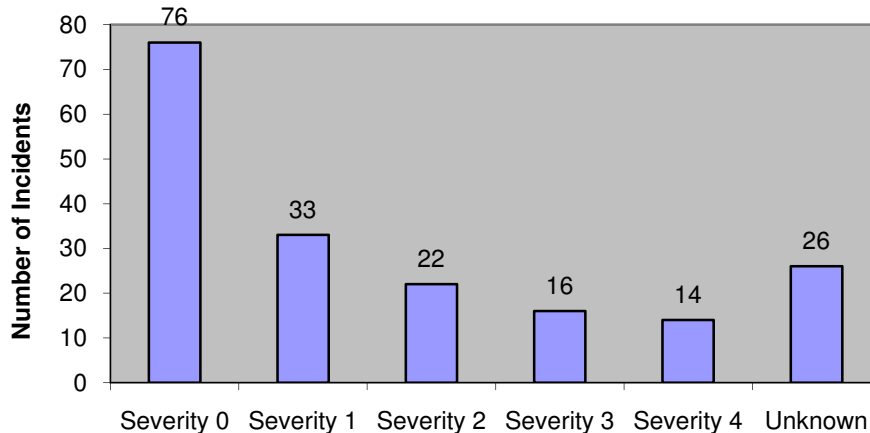
Incident:

Note: A "secondary" incident is one that is the result of an earlier incident.

**Percent of Incidents by Severity Level**



**Number of Incidents by Severity Level**



#### \*Definition of Incident Severity Levels:

*Severity 0:* No injuries and no travel lanes blocked

*Severity 1:* 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

*Severity 2:* 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR Hazmat w/ 0 lanes closed

*Severity 3:* 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

*Severity 4:* All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed

OR Structural damage w/ 1/3, 2/3+ lanes closed

*Unknown:* Incidents without a recorded severity level

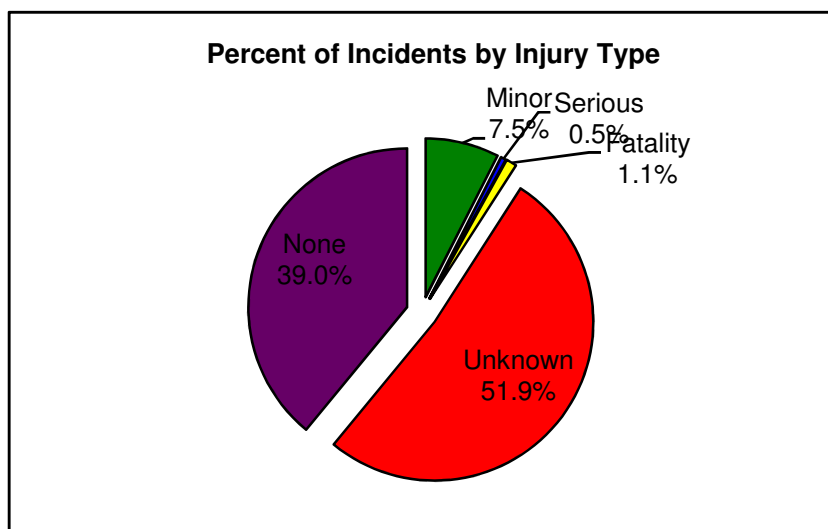
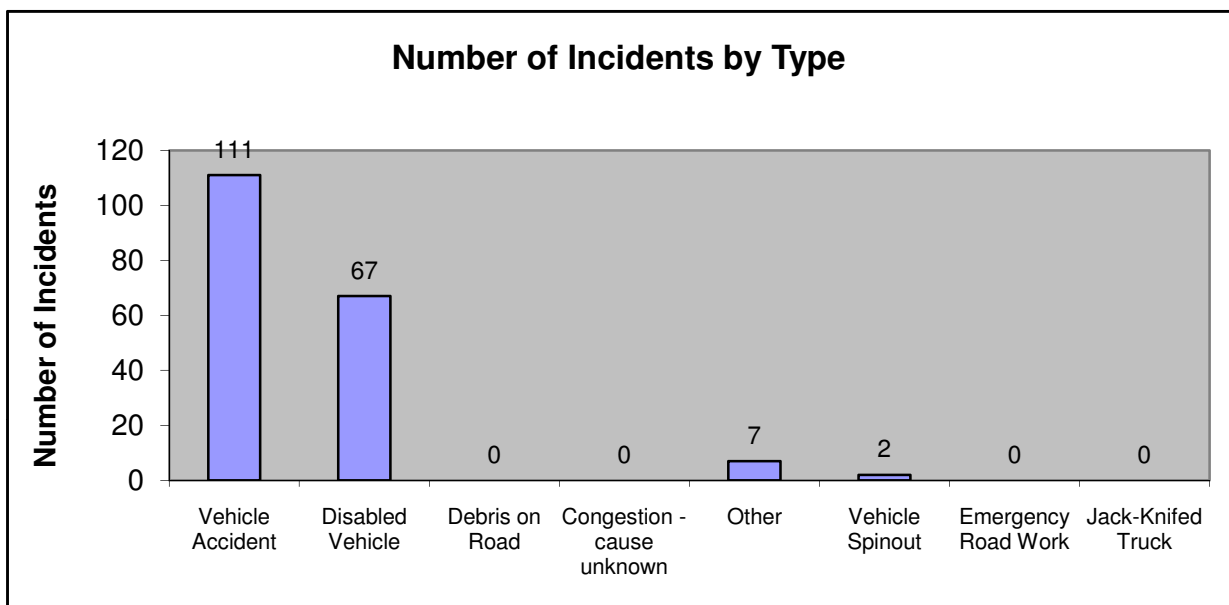
Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

#### 4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	111
Disabled Vehicle	67
Debris on Road	0
Congestion - cause unknown	0
Other	7
Vehicle Spinout	2
Emergency Road Work	0
Jack-Knifed Truck	0
<i>Total Number of Incidents</i>	<i>187</i>

#### 5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	14
Serious	1
Fatality	2
Unknown	97
None	73
<i>Total</i>	<i>187</i>



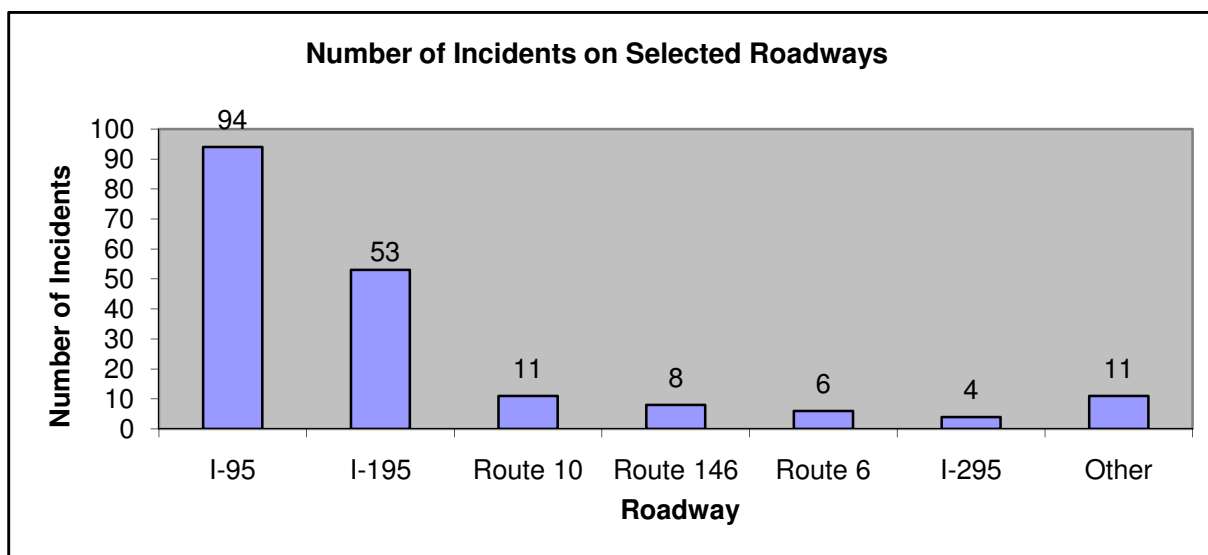
## 6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	154
Wet	33
Icy	0
Snow-Covered	0
Flooded	0
Other	0
<i>Total</i>	<i>187</i>
<b>Precipitation</b>	
None	157
Light-moderate rain falling	30
Heavy rain falling	0
Light-moderate sleet falling	0
Heavy Sleet falling	0
Light-moderate snow falling	0
Heavy snow falling	0
<i>Total</i>	<i>187</i>
<b>Wind</b>	
Calm to Moderate	176
Moderate to Strong	7
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	4
N/A	0
<i>Total</i>	<i>187</i>
<b>Visibility</b>	
Clear	162
Light fog	1
Dense fog	0
Reduced- rain	22
Reduced-snow	0
Poor-heavy rain/sleet	0
Poor-heavy snow	0
Reduced-smoke	0
Other	0
N/A	2
<i>Total</i>	<i>187</i>

## 7. Incidents Detected by Primary Notifier on Selected Roadways

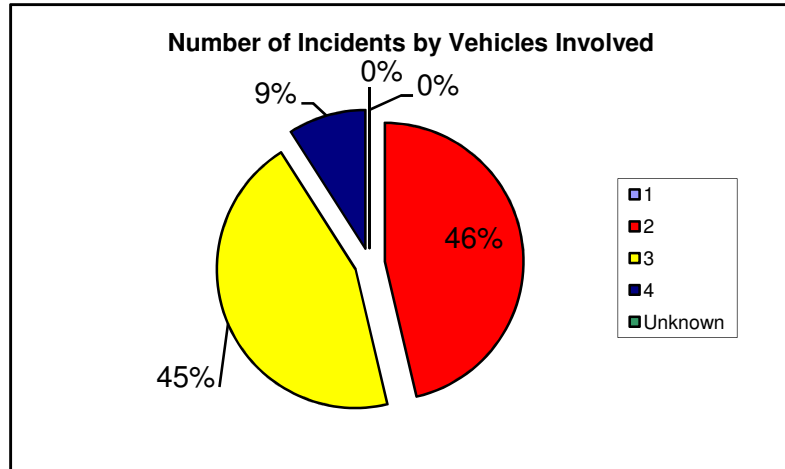
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	34
	State Police Scanner	7
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	11
	Transcom	0
	Other	1
	<b>Total</b>	<b>53</b>
I-95	TMC Operator	50
	State Police Scanner	14
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	29
	Transcom	0
	Other	1
	<b>Total</b>	<b>94</b>
I-295	TMC Operator	0
	State Police Scanner	2
	Local Fire Department	1
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	1
	Transcom	0
	Other	0
	<b>Total</b>	<b>4</b>

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	4
	State Police Scanner	3
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	1
	Traffic.com	0
	TMC State Police	3
	Transcom	0
	Other	0
	<b>Total</b>	<b>11</b>
Route 146	TMC Operator	2
	State Police Scanner	3
	Local Fire Department	1
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	2
	Transcom	0
	Other	0
	<b>Total</b>	<b>8</b>
Route 6	TMC Operator	1
	State Police Scanner	4
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	1
	Transcom	0
	Other	0
	<b>Total</b>	<b>6</b>



## 8. Incidents by Number of Vehicles Involved

No. of Vehicles Involved	No. of Incidents
1	0
2	82
3	79
4	16
5	6
6	3
7	0
8	1
9	0
10+	0
Unknown	0
<b>Total Incidents</b>	<b>187</b>

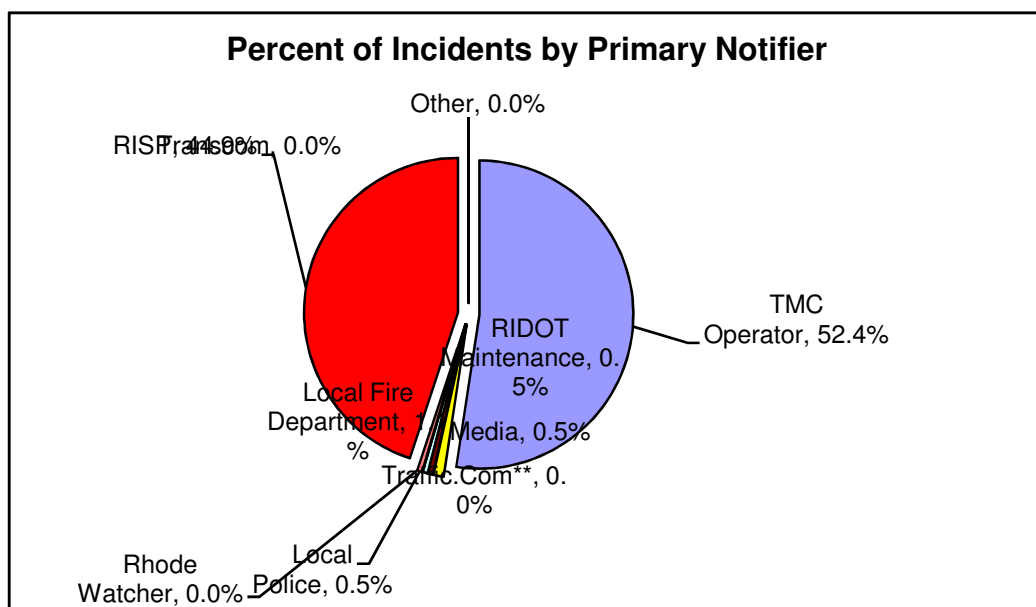


## 9. Incident Notification

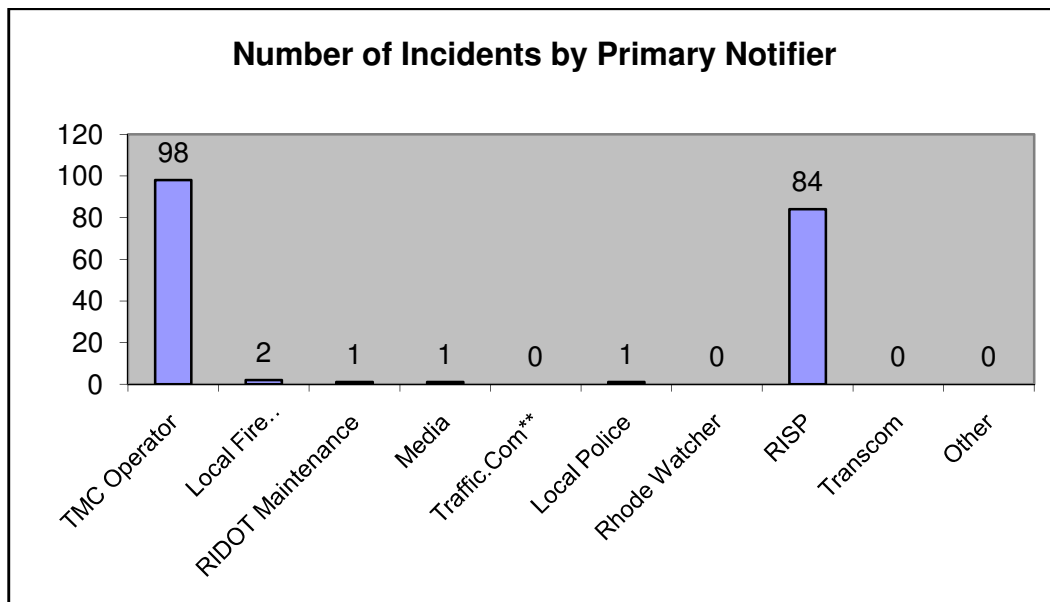
Primary Notifier*	No. of Incidents
TMC Operator	98
Local Fire Department	2
RIDOT Maintenance	1
Media	1
Traffic.Com**	0
Local Police	1
Rhode Watcher	0
RISP	84
Transcom	0
Other	0
<b>Total</b>	<b>187</b>

\*First notifier of the incident to TMC

\*\*Formerly Mobility Technologies

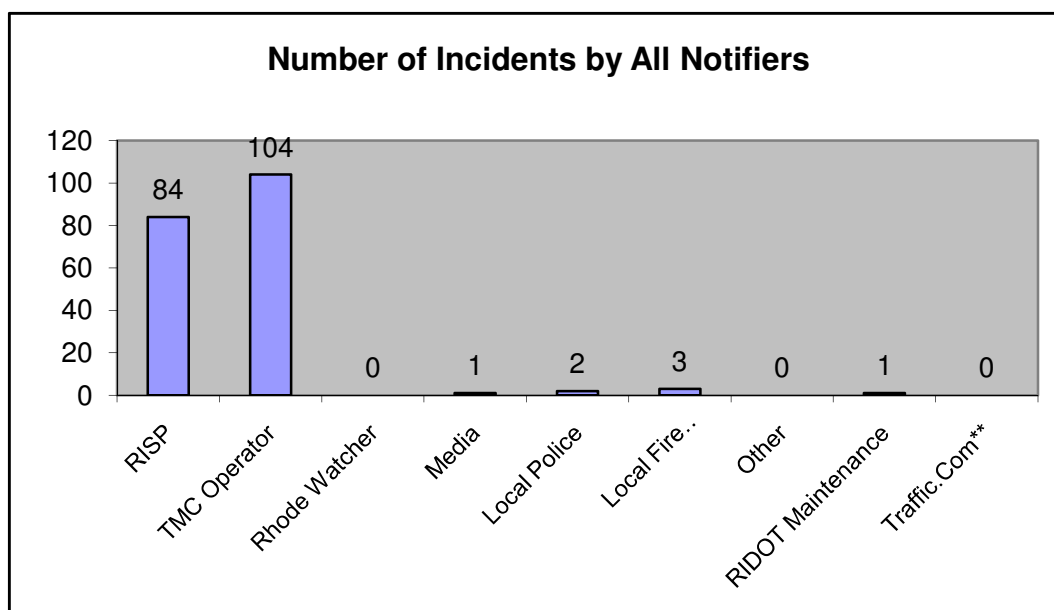






Notifier	No. of Incidents
RISP	84
TMC Operator	104
Rhode Watcher	0
Media	1
Local Police	2
Local Fire Department	3
Other	0
RIDOT Maintenance	1
Traffic.Com**	0
Transcom	0

*Note: Primary notifier indicates the first notifier of the incident to the TMC. Additional notifiers are also logged, and are represented in the statistics for "all notifiers".*



## 10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	131	70.05%
Tow	58	31.02%
Local Fire Department	44	23.53%
EMS	33	17.65%
Local Police	13	6.95%
Service Patrol	13	6.95%
Mass Highway	0	0.00%
DOT	1	0.53%
Hazmat	0	0.00%
DEM	0	0.00%
Connecticut DOT	0	0.00%
Construction	0	0.00%
Coast Guard	0	0.00%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	0	0.00%

TMC Equipment used	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	100
# of VMS Messages	15
# of DMS Messages	86
# of HAR Messages	53
# of Web Messages	#VALUE!

*Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.*

